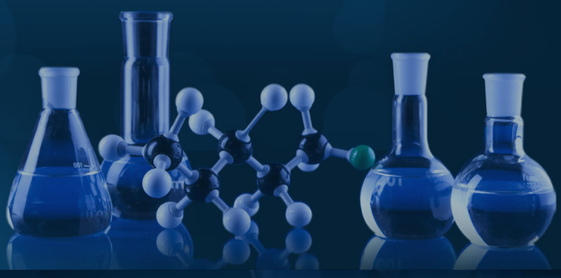

Why Recommend Minerals When The Hair Mineral Level Is High?

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We receive many questions as to why minerals on a hair analysis that are low are not recommended, while others that are elevated are recommended.

False Principles

Recommending minerals that are low on a hair analysis and not those that are high is referred to as replacement therapy. It is based on two false principles. The first is that a hair mineral level only represents the level of that mineral in the body. This is untrue. The hair level may also represent a loss of the mineral into the hair. In other cases, a mineral may not show up in the hair, but may be sequestered elsewhere in the body.

The second principle is that supplementing a mineral that is low will raise the level of that mineral. This premise is also false. Often a mineral level is low in order to preserve another mineral level or ratio. At other times, another factor keeps a mineral level low or high, regardless of dietary or supplementary intake. Just supplementing the low mineral will not raise the level of that mineral. This has been proven over and over again.

An important principle of hair analysis interpretation is that the levels of the minerals in the hair represent the body's adaptation or response to stress. Once we understand that response, we are in a much better position to know how to alter the diet and how to recommend supplements to bring all the minerals into a better balance.

Why Supplement Calcium When The Hair Level Is High?

A high calcium level on a hair analysis often represents a loss of calcium into the soft tissues. One reason for the loss of calcium into the tissues is that under certain circumstances calcium cannot be maintained in an ionized form in the blood. Therefore, it begins to precipitate into the soft tissues.

Dr. Paul Eck's research indicates that when the hair sodium and potassium levels are low, this precipitation occurs. This is similar to the precipitation of calcium onto faucets and pipes in a region with hard water. Water softeners add sodium or potassium to prevent the precipitation of calcium by making the calcium more soluble.

Originally, Dr. Eck did not recommend supplementing calcium when the calcium level is high and instead focused on making the calcium soluble or bioavailable. This is done by enhancing adrenal and thyroid activity, which will raise the levels of the tissue sodium and potassium levels. Also, supplementing with magnesium can help keep calcium in a soluble form. However, as long as the calcium is biounavailable, the body will take calcium from other sites, such as bones or teeth, to replenish the blood calcium. This can lead to osteoporosis. Also, a low serum level of calcium can cause muscle tightness, cramps or spasms, irritability, nervousness, insomnia, heart palpitations and other symptoms.

Supplementing calcium and magnesium for these individuals has the effect of providing extra biologically available calcium. Of itself, this does not lower the tissue calcium level. However, it can be helpful for two reasons. It may help stop the loss of calcium from the bones. Also, it can alleviate symptoms that are due to low levels of calcium and magnesium in the blood.

For this reason, it is often advisable to supplement some calcium, while at the same time providing a dietary, supplement and lifestyle program to enhance adrenal and thyroid glandular activity. This is why calcium and magnesium are supplemented when the levels of these minerals are elevated on a hair analysis. One may also increase calcium and magnesium in the diet.

However, there are few foods other than dairy products, nuts and seeds that provide enough dietary calcium. Dairy products do not provide much magnesium.

Why Not Supplement Potassium When It Is Low?

Potassium levels are usually low in slow oxidizers. Yet, potassium supplements are often not recommended on the nutrition programs. Often individuals with low sodium and potassium levels consume plenty of salt and foods containing potassium. Yet their levels remain low. The reason for this is that sodium and potassium levels depend greatly on the activity of the adrenal and thyroid glands. Low aldosterone levels cause sodium and potassium to be lost in the urine.

Supplementing with extra sodium and potassium can cause symptomatic improvement. We recommend the use of sea salt, unless it is contra-indicated, and plenty of potassium-rich vegetables for those with low sodium and potassium levels. However, correcting the adrenal and thyroid imbalance is far more important and more permanent.

Potassium supplements are sometimes recommended. They can be particularly helpful for symptoms such as muscle cramps and heart irregularities, especially if the diet is deficient in potassium. However, in an effort to balance the effectiveness of the program and the number of supplements recommended, potassium is often not included. It is not considered as important as the other supplements.

Why Not Supplement Iron When The Iron Level Is Low?

There are times to supplement iron, such as in certain anemia's, after blood loss, in vegetarians who do not eat meats, or in menstruating women who lose significant amounts of iron. However, a low hair tissue iron does not always indicate a total body deficiency and supplementation is often unnecessary and unwise.

Many slow oxidizers have low iron levels. Low tissue iron and often low tissue manganese, appear to be more related to a slow oxidation rate, copper imbalance and other factors. As the oxidation rate improves, iron levels usually rise on their own.

Here are other reasons we do not routinely recommend iron supplementation. Iron is found abundantly in foods such as meats and green vegetables. Secondly, many people already receive extra iron in enriched flour products and many vitamin pills. Third, high-dosage iron supplements can interfere with the absorption of other critical minerals including chromium, manganese, zinc and others. Fourth, excess iron supplementation can be harmful. Iron toxicity can and does occur. During the course of a nutritional corrective program, a retest will commonly show high iron as excess iron is eliminated from tissue storage sites.

Some slow oxidizers are anemic. However, in many cases this is not due to low iron. Instead, it is a copper-induced anemia. This anemia appears identical to microchromic, microcytic iron-deficiency anemia. In these cases, a copper deficiency, usually due to biounavailable copper, causes a failure of incorporation of iron into hemoglobin.

It may also cause a failure to change iron from the ferrous to the ferric form in the process of forming hemoglobin. Correction of this type of anemia involves correcting copper metabolism.